

## CLAIMS

What is claimed is:

1. Apparatus for interlocking material supply equipment in semiconductor manufacture system, said apparatus comprising:

a controller used for treatment of bar-code information;

a bar-code scanner communicating with said controller through a transmission system, said bar-code scanner for collecting said bar-code information of said material supply equipment; and

a plurality of alarm devices coupled to a plurality of material supply equipment and said controller, said alarm devices receiving a plurality of alarm message from said controller.

2. The apparatus of claim 1, wherein said controller comprises software having a function of by-pass bar-code.

3. The apparatus of claim 1, wherein said treatment of said controller comprises:

receiving said bar-code information from said bar-code scanner through said transmission system;

checking said bar-code information;

transferring said alarm message into said alarm devices; and

disabling said corresponding material supply equipment according to said alarm message.

could be added  
4. The apparatus of claim 1, wherein said treatment further comprises displaying said alarm message on a display screen of said controller and disabling a plurality of consequent steps corresponding said material supply equipment on said display screen.

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5. The apparatus of claim 1, wherein said transmission system comprises a wireless communication station and an input/output device.

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6. The apparatus of claim 5, wherein said wireless communication station is coupled to said input/out device with a local network.

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7. The apparatus of claim 5, wherein said input/output device is a hub.

8. The apparatus of claim 1, wherein said bar-code information comprises:

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a material name;  
a material lot number;  
a quantity of said material; and  
an identification of said equipment material for checking of said controller.

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9. A system for interlocking material supply equipment in semiconductor manufacture system, said system comprising:

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collecting means for collecting a user's and material information;  
communication means for transferring said user's and said  
material information;

5 a controller communicated with said material supply equipment  
and said collecting means through said communication means, said  
controller for sending out a plurality of alarm message; and

alarm means coupled to said material supply equipment and  
communicated with said controller through said communication means,  
said alarm means for displaying said alarm message and controlling said  
10 material supply equipment.

10. The system of claim 9, wherein said collecting means  
comprises a bar-code scanner.

15 11. The system of claim 10, wherein said user's information is  
inputted into said bar-code scanner by an input device of said bar-code  
scanner.

20 12. The system of claim 9, wherein each said material  
information is stored in a bar-code stamped on said each material  
supply equipment.

25 13. The system of claim 12, wherein said bar-code comprises:

- a material name;
- a material lot number;
- a material quantity; and

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a material identification for checking of said controller.

14. The system of claim 9, wherein said communication means comprises a wireless communication station and an input/output  
5 device.

15. The system of claim 9, wherein said controller comprises communicating with a plurality of exterior controllers.

10 16. The system of claim 9, wherein said controller is used for treatment of said user's and said material information, and said treatment comprises:

receiving said user's and said material information from said collecting means through said communication means;

15 checking said user's and said material information;

transferring said alarm message into said alarm means; and

disabling said material supply equipment according to said alarm message.

20 17. The system of claim 16, wherein said controller further comprises displaying said alarm message, said user's and material information on a display screen of said controller and disabling a plurality of consequent steps for said corresponding material supply equipment on said display screen.

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18. The system of claim 9, wherein said alarm means comprises

an alarm button coupled to a controlling device of said material supply equipment, and said alarm button can disable said controlling device according to said alarm message.

5           19. A method for interlock managing change materials of material supply equipment in semiconductor manufacture system, said method comprising:

collecting changed material information of said material supply equipment;

10           checking said changed material information by a controller communicated with said material supply equipment;

            sending out an alarm message to said material supply equipment from said controller; and

            disabling said corresponding material supply equipment  
15           according to said alarm message.

            20. The method according to claim 19 further comprising:

authorizing a user to collect said changed material information;

            transferring said changed material information to said controller  
20           through a wireless communication station and a local network; and

            displaying said changed material information and said alarm message on a screen of said controller.

            21. The method according to claim 19, wherein said disabling  
25           step comprises disabling a plurality of consequent steps of said corresponding material supply equipment shown on a display screen of

said controller.

22. The method according to claim 19, wherein said collecting step is accomplished with a bar-code scanner.

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23. The method according to claim 19, wherein said changed material information comprises a user's identification.

24. The method according to claim 19, wherein said changed  
10 material information comprises a lot number and a name of said changed material stored in a bar-code.

105 → 25. The method according to claim 19, wherein said checking  
15 step comprises comparing said changed information with a database of said controller.